CLAIMS

We claim:

- 1. A light to be worn on a user's head, comprising:
- a light source;
- a housing for the light source;
- cooling fins that project from the housing;
- a fan that can cool the light source; and
- a headband on which the housing is retained; whereby the light source may be retained on a user's head.
 - 2. The light to be worn on a user's head according to claim
- 1, wherein the light source is an electric lamp.
- 3. The light to be worn on a user's head according to claim
- 2, wherein the light source is a halogen lamp.
 - 4. The light to be worn on a user's head according to claim
- 1, wherein the fan is mounted in a side wall of the housing.
 - 5. The light to be worn on a user's head according to claim
- 1, wherein the housing is pivotally mounted on the headband.

6. The light to be worn on a user's head according to claim 5, wherein the housing can pivot vertically.

7. The light to be worn on a user's head according to claim 1, wherein the circumference of the headband can be adjusted, whereby the headband will fit heads of different users.

8. The light to be worn on a user's head according to claim 7, wherein:

the headband has a first part with two opposite ends, and a second part with two opposite slots into each of which an end of the first part is inserted, and a knob on the second part;

said knob can be turned in a first direction to pull the opposite ends of the first part together, thereby reducing the circumference of the headband; and

said knob can be turned in an opposite second direction to push the ends apart, thereby increasing the circumference of the headband.

9. The light to be worn on a user's head according to claim 8, wherein the headband has a transverse strip with an adjustable length, whereby the headband can be more securely retained on heads of different users.

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- 10. The light to be worn on a user's head according to claim 9, wherein at least one stip of padded material is retained on the headband.
- 11. The light to be worn on a user's head according to claim 10, wherein at least one of said strips of padded material is removably retained on the transverse strip by at least one strip of hook and loop fasteners.
- 12. The light to be worn on a user's head according to claim

 1, wherein the light source and the fan are activated by a single
 source of electric power.
- 13. The light to be worn on a user's head according to claim12, including a switch having a user moveable element that:

when moved to a first position closes an electrical circuit between the single source of electrical power and the light source and the fan, thereby activating the light source and the fan; and

when moved to second position opens the electrical circuit between the single source of electrical power and the light source and the fan, thereby deactivating the light source and the fan.

- 14. The light to be worn on a user's head according to claim 13, wherein the user moveable element moves in a first linear direction when moved from the second position to the first position, and in an opposite second linear direction when moved from the first position to the second position, without pivoting.
- 15. The light to be worn on a user's head according to claim 14, wherein the user moveable element has a first end that contacts a first socket in the first position and lies away from the first socket in the second position, and an opposite second end that lies away from a second socket in the first position and contacts the second socket in the second position.
- 16. The light to be worn on a user's head according to claim 15, wherein:

the first end and the second end of the user moveable element are flat cylinders;

the user moveable element has a cylindrical shaft between its first end and its second end; and

the cylindrical shaft has a smaller diameter than said ends.

17. The light to be worn on a user's head according to claim 16, wherein the single power source is a rechargeable battery.

18. The light to be worn on a user's head according to claim 17, including:

wires connected to poles of the rechargeable battery that join to form a first cord that is connected to a moveable electrical socket; and

a second cord, having a first end that is electrically connected to the light source and the fan, and a second end that is connected to a plug;

wherein, if the plug is inserted into the moveable electrical socket, and the user moveable element of the switch is in the first position, electrical power from the rechargeable battery can activate the light source and the fan.

19. The light to be worn on a user's head according to claim18, including:

a pouch within which the rechargeable battery can be retained;

a zipper, which when moved in a first direction opens the pouch to permit insertion of the rechargeable battery, and when moved in a second direction closes the pouch, except for a small aperture through which the first cord can pass, to more securely retain the rechargeable batter.

20. The light to be worn on a user's head according to claim
19, wherein the pouch is retained on an adjustable belt, by which
the pouch can be retained on a user's body.